

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method of producing polyoxytetramethylene glycol by ring-opening-~~polymerizing~~ polymerization of tetrahydrofuran in the presence of acetic anhydride and an acid catalyst, comprising:

~~wherein said ring opening polymerization is conducted using acetic anhydride having a diketene concentration of 2 ppm or less to produce polyoxytetramethylene glycol.~~

purifying said acetic anhydride to reduce diketene concentration, such that said purified acetic anhydride, after performing a heat treatment of between 80 and 120 degrees Celsius for at least 5 hours, has a hue value of 10 ALPHA units or less subsequent to a sulfuric acid coloring test;

conducting the ring-opening-polymerization with said purified acetic anhydride and said acid catalyst.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Previously amended) A method of purifying crude acetic anhydride wherein treatment with an ozone-containing gas is conducted after distilling acetic anhydride containing diketenes.

6. (Currently amended) A method of producing polyoxytetramethylene glycol by ring-opening-~~polymerizing~~ polymerization of tetrahydrofuran in the presence of the acetic anhydride ~~purified by the purification method of Claim 5,~~ and an acid catalyst, comprising:

purifying said acetic anhydride by treatment of an ozone-containing gas after distilling crude acetic anhydride containing ketenes;

conducting the ring-opening-polymerization with said purified acetic anhydride and said acid catalyst.

7. (Cancelled)

8. (New) A method of purifying crude acetic anhydride as recited in claim 5 wherein said purified crude acetic anhydride, after performing a heat treatment of between 80 and 120 degrees Celsius for at least 5 hours, has a hue value of 10 ALPHA units or less subsequent to a sulfuric acid coloring test.

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cancel*
9. (New) A method of purifying crude acetic anhydride as recited in claim 5 wherein said purified crude acetic anhydride has a diketene concentration below 2 ppm.

10. (New) A method of purifying crude acetic anhydride as recited in claim 8 wherein said purified crude acetic anhydride has a diketene concentration below 2 ppm.
